National Science Foundation
Office of Budget, Finance, and Award Management
Division of Institution and Award Support

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Risk Assessment Guide for Post Award Monitoring Site Visits

This document, *Risk Assessment Guide for Post Award Monitoring Site Visits*, is a component of the BFA Award Monitoring and Business Assistance Program (AMBAP). It describes the risk assessment process and tools BFA uses to prepare its annual AMBAP Site Visit Review Plan for advanced (high risk) post award monitoring as described in the *Post Award Monitoring & Business Assistance Site Visit Review Guide*. The *Risk Assessment Guide* applies to all NSF awards excluding contracts and awards specifically covered by the *Facilities Management and Oversight Guide.*

The Division of Institution and Award Support (DIAS) has lead management responsibility for AMBAP. Within DIAS, the Cost Analysis and Audit Resolution Branch, (CAAR) is responsible for implementation of the annual AMBAP Site Visit Review Plan.

I. Risk Assessment Process

DIAS management reviews the process and the risk assessment model each year and makes adjustments and improvements as appropriate. The DIAS Systems Branch then applies the current risk model to all active awards in the NSF award system to generate a ranked list of awards. For example, there were 34, 598 active awards in the NSF system at the time the FY 2005 risk model was applied. Risk factors included objective factors such as: type of awardee organization, dollar amount of award, Federal oversight, complexity of award, cost sharing, subawards, participant support, and equipment. It should be noted that the NSF data for many of these expense line items is based on the approved budget and that there could be variance with actual expenditures.

This listing of total awards is then reduced to a more manageable subset by assigning a minimal risk rating. For FY 2005 the identification of high-risk awards was set at 16 points. All awards that totaled 16 or more risk points were then taken from the total population to form a subset of identified risk awards. This group of 252 high-risk awards was then subtotaled by awardee organization to provide a single point total for risk for that business entity. In addition, risk factor points were added by institution where NSF was cognizant or had oversight responsibilities for audit resolution, NSF negotiates indirect cost rates, and where the organization was a new awardee. One hundred and sixty-seven awardee organizations were identified that had high-risk awards.

A subjective review was performed of the higher risk organizations so identified to eliminate those organizations that:

- were AMBAP site reviewed the previous year or had BFA site visits performed in 2003 or 2004.
- were currently on the OIG audit plan or had OIG conducted audit reports issued within the last four years.
- had NSF awards that were due to expire because we wanted active awards.
- were covered by the Facilities Management & Oversight Guide such as FFRDCs and MREFCs.

An overall risk rating for each award is determined by combining the number of objective and subjective "risk" factors associated with a particular award.

II. Risk Assessment Model: Objective Factors

Type of Awardee Organization – Based on past audit reports, site visits, and a professional judgment: certain types of awardee organizations tend to have higher performance risks than other types of organizations. For this assessment we used:

Academic Institution	0
Non-profit Organization	1
For-profit Organization	2
Community College	3
School District or Tribal Government	4
Foreign Awardees	5

Dollar Amount of Award - As part of this risk assessment, we wanted to deploy efficiently limited NSF resources to "follow the dollars." The premise being that larger dollar awards would tend to be more complex and that we wanted to obtain as wide of coverage of NSF award funds as the limited number of AMBAP site visits would allow. For this assessment we used:

Under $500,000	1
$500,001 to $2,000,000	2
$2,000,000 to $5,000,000	3
$5,000,000 to $10,000,000	4
$10,000,000 and over	5

Complexity of Award Instrument - NSF makes different types of awards. The type of award made can be an indicator as to the complexity of the award activity. A basic grant to a Principal Investigator is not going to be as complex as a cooperative agreement, or a cooperative agreement for a large research center award. Therefore, we incorporated the following risk factors:

Grants for basic Research	1
Cooperative Agreement – single award	2
Cooperative Agreement – large center	3

Award Responsibilities – In order to ensure that NSF was fulfilling its responsibilities for oversight and administration, we assigned a risk factor based on NSF cognizance.

NSF Audit Cognizant FAC[1] Determined	3
NSF Oversight Agency FAC Determined	2
New Awardee Organization	3

Cost Sharing – NSF's OIG audit reports have repeatedly identified cost sharing as a risk area for NSF awardees. Frequently, awardee organizations have had problems documenting cost sharing expenditures and the valuation of cost sharing amounts claimed. While this will be an area of reduced risk for future awards based on recent National Science Board decisions, cost sharing will still be required for awards already made. The following values were based on the total amount of cost sharing required on that award:

None	0
Less than $100,000	1
$100,001 to $500,000	2
$500,001 to $2,000,000	3
$2,000,001 to $5,000,000	4
Over $5,000,000	5

[1] Federal Audit Clearinghouse

Subawards – The total dollar amount of subawards that the prime awardee makes on an award is also a risk factor. The prime awardee is responsible for a subawardee monitoring and management. Large dollar amounts of subawards tend to indicate more complex projects involving more than one organization. The weights assigned to this factor were as follows:

None	0
Less than $100,000	1
$100,001 to $500,000	2
$500,001 to $2,000,000	3
$2,000,001 to $5,000,000	4
Over $5,000,000	5

Participant Support – NSF has Agency specific requirements governing the use of funds budgeted as participant support. NSF Program Officer approval is required before these funds are allowed to be rebudgeted to other categories. In addition, some awardee accounting systems do not track these funds as a separate line item. Therefore, we felt that awards with large dollar amounts in the participant support category would be of a higher risk. This was categorized as follows:

None	0
Up to $50,000	1
$50,001 to $200,000	2
$200,001 to $300,000	3
$300,001 to $500,000	4
Over $500,000	5

Government-Owned Equipment – While equipment was a consideration on the 2004 Risk Assessment Model it was based on where title to the equipment vested. For most of our awardees (Colleges & Universities and Non-profit organizations), NSF policy provides that title to equipment purchased with award funds vests with the awardee institution. Therefore, the number of organizations that have control over NSF owned equipment is a relatively small number. Issues with equipment include procurement practices, property inventories, and stewardship of equipment items purchased. For our assessment we used these factors:

Less than $20,000	0
$20,001 to $100,000	1
$100,001 to $500,000	2
$500,001 to $2,000,000	3
$2,000,001 to $10,000,000	4
Over $10,000,000	5

Federal Oversight – Most of the NSF awardees are assigned a cognizant Federal agency other than NSF for audit and oversight responsibilities. However, there are a number of awardee organizations for which NSF fulfills this responsibility. We wanted to make sure that we substantially elevated our risk factors to insure that NSF was addressing the institutions NSF is cognizant for during the AMBAP reviews. Therefore we established the following increased factors:

NSF Audit Cognizant FAC [2]Determined	15
NSF Oversight Agency FAC Determined	10

New Awardee – Both NSF management and the OIG have identified higher risk associated with organizations that have just received their first NSF award. Frequently these organizations are not completely familiar with the financial and administrative requirements. Therefore, we included a special risk factor to address this concern.

New Awardee Organization	15

III. RISK ASSESSMENT MODEL: Subjective Factors

Subjective factors are included in the risk assessment model since not all the concerns or considerations of NSF staff involved in post award administration can be satisfied by data elements input into the award system. These factors are not assigned a specific weight, but the relative impact will be determined by the professional judgment of, and in consultation with, the DIAS team leaders responsible for the AMBAP Risk Assessment and Award Monitoring. In May 2005, DIAS instituted a formal annual solicitation to NSF program staff for their recommendations for the annual AMBAP Site Visit Plan**.**

FCTR reporting – CAAR reviews final adjustments to expired and financially closed awards greater the $10,000. This is one measure of awardee financial reporting. We utilized the final adjustment logs to obtain a listing of the final adjustments by organization. Where the awardee organization had made three or more of these $10,000 adjustments they were noted for FCTR reporting problems as a subjective risk factor.

Final Project Reporting – We also obtained a list of late Final Project Reports by awardee organization. The top 25 awardee organizations on that list were also assigned a subjective factor for overdue Final Project Reports (FPR).

Site Visit Selection – From the list of 167 organizations with high-risk awards 24 were selected as candidates for AMBAP site visits in 2005. Additional site visits may be added as resources become available or target specific reviews at the request of NSF Program Officer.

[2] Federal Audit Clearinghouse

IV. Annual AMBAP Activity Schedule

May	Review model and risk factors
	Issue annual solicitation to NSF for site visit recommendations
June	Generate high risk award list from award system
mid-June to mid-July	Develop next fiscal year AMBAP site visit plan
July	Disseminate plan to NSF and ask again for recommendations
	Make staff assignments for AMBAP site visits
mid-August	Send notification letter to all organizations informing them of upcoming site visit and planned month of visit
mid-August to mid-September	Prepare for upcoming October visits and monthly thereafter
August 31	Begin sending site visit confirmation letters for 1st quarter visits allowing 30 days notice;
October 31	Adjust AMBAP Site Visit Plan to incorporate NSF requests and to exclude OIG planned reviews/audits.